Please amend the claims as set forth below:

CLAIM 1(ORIGINAL). A method for producing cranial remodeling devices to correct for cranial shape abnormalities comprising:

capturing a three dimensional digital image of a deformed head to produce first digital data; and

utilizing said first digital data to automatically provide cranial remodeling device information for use in fabricating a cranial remodeling device for said deformed head.

CLAIM 2 (ORIGINAL). A method in accordance with claim 1, wherein:

said cranial remodeling device information comprises identification of one of a plurality of types of cranial remodeling devices.

CLAIM 3 (ORIGINAL). A method in accordance with claim 2, wherein:

said plurality of types of cranial remodeling devices includes devices for treatment of specific types of cranial deformities.

CLAIM 4 (ORIGINAL). A method in accordance with claim 3, wherein:

said specific types of cranial deformities comprise one or more of plagiocephaly, brachycephaly, and scaphocephaly.

CLAIM 5 (ORIGINAL). A method in accordance with claim 3, wherein:

said cranial remodeling device information comprises predetermined configuration features that may be incorporated in said cranial remodeling device.

CLAIM 6 (ORIGINAL). A method in accordance with claim 5, wherein:

said predetermined configuration features comprise predetermined design features.

CLAIM 7 (ORIGINAL). A method in accordance with claim 6, wherein:

said predetermined design features are selected from a group comprising a right anterior corner, a left anterior corner, a right posterior corner, a left posterior corner, a fractional posterior cap, a fractional anterior cap and a lengthwise strut across top of band.

CLAIM 8 (ORIGINAL). A method in accordance with claim 1, wherein:

said cranial remodeling device information comprises a style information selected from a group comprising a right side opening cranial remodeling band, a wide right side opening cranial remodeling band, a left side opening cranial remodeling band, and a wide left side opening cranial remodeling band.

CLAIM 9 (ORIGINAL). A method in accordance with claim 1, comprising:

utilizing said first data to automatically produce a physical model: and

utilizing said physical model and said cranial remodeling device information to produce said cranial remodeling device.

CLAIM 10 (ORIGINAL). A method for producing cranial remodeling devices to correct for cranial shape abnormalities comprising:

capturing a three dimensional, substantially global digital image of a deformed head to

produce first digital data; and

utilizing one or more neural networks operating on said first digital data to automatically provide cranial remodeling device information for use in fabricating a cranial remodeling device for said deformed head.

CLAIM 11 (ORIGINAL). A method in accordance with claim 10, wherein:

said cranial remodeling device information comprises identification of one of a plurality of types of cranial remodeling devices.

CLAIM 12 (ORIGINAL). A method in accordance with claim 11, wherein:

said plurality of types of cranial remodeling devices includes devices for treatment of specific types of cranial deformities.

CLAIM 13 (ORIGINAL). A method in accordance with claim 12, wherein:

said specific types of cranial deformities comprise one or more of plagiocephaly, brachycephaly, and scaphocephaly.

CLAIM 14 (ORIGINAL). A method in accordance with claim 12, wherein:

said cranial remodeling device information comprises predetermined design features to be incorporated in said cranial remodeling device.

CLAIM 15 (ORIGINAL). A method in accordance with claim 14, wherein:

said predetermined design features comprise standardized structural configurations.

Page 4 of 14

CLAIM 16 (ORIGINAL). A method in accordance with claim 15, wherein:

said standardized structural configurations are selected from a group comprising a right anterior corner, a left anterior corner, a right posterior corner, a left posterior corner, a fractional anterior cap, a fractional posterior cap, and a lengthwise strut across top of band.

CLAIM 17 (ORIGINAL). A method in accordance with claim 10, wherein:

said cranial remodeling device information comprises a device style selected from a group comprising a right side opening cranial remodeling band, a wide right side opening cranial remodeling band, a left side opening cranial remodeling band, and a wide left side opening cranial remodeling band.

CLAIM 18 (ORIGINAL). A method in accordance with claim 10, comprising:

utilizing said first data to automatically produce a physical model of a modified head shape; and

utilizing said physical model of said head and said cranial remodeling device information to produce said cranial remodeling device.

CLAIM 19 (ORIGINAL). A method for producing a cranial remodeling device to correct for a cranial shape abnormality, comprising:

capturing a digital image of a deformed head to produce first digital data:

automatically processing said first digital data to produce second data corresponding to a desired shape for use in forming a cranial remodeling device; and

Page 5 of 14

automatically providing cranial remodeling device information for use in fabricating a cranial remodeling device for said deformed head.

CLAIM 20 (ORIGINAL). A method in accordance with claim 19, wherein:

said cranial remodeling device information comprises identification of one of a plurality of types of cranial remodeling devices.

CLAIM 21 (ORIGINAL). A method in accordance with claim 20, wherein:

said plurality of types of cranial remodeling devices includes devices for treatment of specific types of cranial deformities.

CLAIM 22 (ORIGINAL). A method in accordance with claim 21, wherein:

said specific types of cranial deformities comprise one or more of plagiocephaly, brachycephaly, and scaphocephaly.

CLAIM 23 (ORIGINAL). A method in accordance with claim 21, wherein:

said cranial remodeling device information comprises predetermined design features that are selectable for inclusion in said cranial remodeling device.

CLAIM 24 (ORIGINAL). A method in accordance with claim 23, wherein:

said predetermined design features comprise standardized structural configurations.

CLAIM 25 (ORIGINAL). A method in accordance with claim 24, wherein:

Page 6 of 14

said standardized structural configurations are selected from a group comprising two or more of a right anterior corner, a left anterior corner, a right posterior corner, a left posterior corner, a fractional anterior cap, a fractional posterior cap, and a lengthwise strut across top of band.

CLAIM 26 (ORIGINAL). A method in accordance with claim 19, wherein:

said eranial remodeling device information is automatically selected from a group comprising a right side opening cranial remodeling band, a wide right side opening cranial remodeling band, a left side opening cranial remodeling band, and a wide left side opening cranial remodeling band.

CLAIM 27 (ORIGINAL). A method in accordance with claim 19, comprising:

utilizing said second data to automatically produce a physical model of said desired shape; and

utilizing said physical model and said cranial remodeling device information to produce said cranial remodeling device.

CLAIM 28 (ORIGINAL). A method in accordance with claim 19, comprising:

utilizing said second data to automatically produce said cranial remodeling device.

CLAIM 29 (ORIGINAL). A system for producing cranial remodeling devices to correct for cranial shape abnormalities comprising:

a digitizer operable to capture three dimensional digital image data of a deformed head to

produce first digital data:

a computer:

computer programs operable on said computer such that said computer processes said first digital data to automatically provide cranial remodeling device information for use in fabricating a cranial remodeling device for said deformed head.

CLAIM 30 (ORIGINAL). A system in accordance with claim 29, wherein:

said cranial remodeling device information comprises identification of one of a plurality of types of cranial remodeling devices.

CLAIM 31 (ORIGINAL). A system in accordance with claim 30, wherein:

said plurality of types of cranial remodeling devices includes devices for treatment of specific types of cranial deformities.

CLAIM 32 (ORIGINAL). A system in accordance with claim 31, wherein:

said specific types of cranial deformities comprise one or more of plagiocephaly, brachycephaly, and scaphocephaly.

CLAIM 33 (ORIGINAL). A system in accordance with claim 31, wherein:

said cranial remodeling device information comprises predetermined design features that may be incorporated in said cranial remodeling device.

CLAIM 34 (ORIGINAL). A system in accordance with claim 33, wherein:

Page 8 of 14

said predetermined design features comprise standardized structural configurations.

CLAIM 35 (ORIGINAL). A system in accordance with claim 34, wherein:

said standardized structural configurations are selected from a group comprising one or more of a right anterior corner, a left anterior corner, a right posterior corner, a left posterior corner, a fractional anterior cap, a fractional posterior cap, and a lengthwise strut across top of band.

CLAIM 36 (ORIGINAL). A system in accordance with claim 34, wherein:

said cranial remodeling device information comprises a selection from a group comprising one or more of a right side opening cranial remodeling band, a wide right side opening cranial remodeling band, a left side opening cranial remodeling band, and a wide left side opening cranial remodeling band.

CLAIM 37 (ORIGINAL). A system in accordance with claim 29, comprising:

said computer utilizing said first data to automatically produce a physical model from which said cranial remodeling device is produced.

CLAIM 38 (ORIGINAL). A system for producing cranial remodeling devices to correct for cranial shape abnormalities comprising:

a digitizer operable to capture a digital image of a head to produce first digital data; and a computer:

one or more neural networks operable on said computer and responsive to said first

Page 9 of 14

digital data to automatically provide cranial remodeling device information for use in fabricating a cranial remodeling device for said head.

CLAIM 39 (ORIGINAL). A system in accordance with claim 38, wherein:

said cranial remodeling device information comprises identification of one of a phurality of types of cranial remodeling devices.

CLAIM 40 (ORIGINAL). A system in accordance with claim 39, wherein:

said plurality of types of cranial remodeling devices includes devices for treatment of specific predetermined types of cranial deformities.

CLAIM 41 (ORIGINAL). A system in accordance with claim 40, wherein:

said specific types of cranial deformities comprise one or more of plagiocephaly, brachycephaly, and scaphocephaly.

CLAIM 42 (ORIGINAL). A system in accordance with claim 40, wherein:

said cranial remodeling device information comprises predetermined design features that may be incorporated in said cranial remodeling device.

CLAIM 43 (ORIGINAL). A system in accordance with claim 42, wherein: said predetermined design features comprise structural configurations.

CLAIM 44 (ORIGINAL). A system in accordance with claim 43, wherein:

Page 10 of 14

said structural configurations are selected from a group comprising one or more of a right anterior corner, a left anterior corner, a right posterior corner, a left posterior corner, a fractional anterior cap, a fractional posterior cap, and a lengthwise strut across top of band.

CLAIM 45 (ORIGINAL). A system in accordance with claim 38, wherein:

said cranial remodeling device information includes selection of a cranial remodeling device style selected from a group comprising a right side opening cranial remodeling band, a wide right side opening cranial remodeling band, a left side opening cranial remodeling band, and a wide left side opening cranial remodeling band.

CLAIM 46 (ORIGINAL). A system in accordance with claim 38 comprising:

said system comprises apparatus utilizing said first data to automatically produce a physical model from which said cranial remodeling device is fabricated.

CLAIM 47 (CURRENTLY AMENDED). A system for producing cranial remodeling devices to correct for cranial shape abnormalities comprising:

a digitizer operable to capture a three dimensional digital image of a deformed head to produce first digital data:

a computer operable to automatically process said first digital data to produce second data corresponding to a desired shape for use in forming a cranial remodeling device; and

said computer utilizing at least one of said first digital data and said second data to automatically providing provide cranial remodeling device information for use in fabricating a cranial remodeling device for said deformed head.

Page 11 of 14

CLAIM 48 (CURRENTLY AMENDED). A system in accordance with claim 47, wherein:

said <u>cranial remodeling device configuration</u> information comprises identification of one of a plurality of styles of cranial remodeling devices.

CLAIM 49 (ORIGINAL). A system in accordance with claim 48, wherein:

said plurality of styles of cranial remodeling devices includes devices for treatment of specific types of cranial deformities.

CLAIM 50 (ORIGINAL). A system in accordance with claim 49, wherein:

said specific types of cranial deformities comprise one or more of plagiocephaly, brachycephaly, and scaphocephaly.

CLAIM 51 (ORIGINAL). A system in accordance with claim 49, wherein:

said cranial remodeling device information comprises predetermined design features that may be incorporated in said cranial remodeling device.

CLAIM 52 (ORIGINAL). A system in accordance with claim 51, wherein: said predetermined design features comprise structural configurations.

CLAIM 53 (ORIGINAL). A system in accordance with claim 52, wherein:

said structural configurations are selected from a group comprising one or more of a right anterior corner, a left anterior corner, a right posterior corner, a left posterior corner, a fractional

Page 12 of 14

anterior cap, a fractional posterior cap, and a lengthwise strut across top of band.

CLAIM 54 (ORIGINAL). A system in accordance with claim 47, wherein:

said cranial remodeling device information comprises a device type selection selected form a group comprising a right side opening cranial remodeling band, a wide right side opening cranial remodeling band, a left side opening cranial remodeling band, and a wide left side opening cranial remodeling band.

CLAIM 55 (ORIGINAL). A system in accordance with claim 47, wherein:

said computer is operable to utilize said second data to automatically produce a physical model of said desired shape.